

Number	Name	Type	Material	Thickness (Weight (oz)	
	Top Overlay	Overlay			
	Top Solder	Solder Mask	Solder Resist	1	
1	Top Layer	Signal		1.85	1
	Dielectric 1	Prepreg	FR-4 High Tg	4.396	
2	GND1	Signal		1.26	1
	Dielectric 2	Core	FR-4 High Tg	5	
3	SIG1	Signal		0.689	0.5
	Dielectric 3	Prepreg	FR-4 High Tg	10.312	
4	PWR1	Signal		1.26	1
	Dielectric 4	Prepreg	FR-4 High Tg	5	
5	PWR2	Signal		1.26	1
	Dielectric 5	Prepreg	FR-4 High Tg	10.312	
6	SIG2	Signal		0.689	0.5
	Dielectric 6	Core	FR-4 High Tg	5	
7	GND2	Signal		1.26	1
	Dielectric 7	Prepreg	FR-4 High Tg	4.396	
8	Bottom Layer	Signal		1.85	1
	Bottom Solder	Solder Mask	Solder Resist	1	
	Bottom Overlay	Overlay			
	Total Thickness (mil)			56.534	

Board Layer Stack

Number	Name	Type	Material	Thickness (Weight (oz)	
	Top Overlay	Overlay			
	Top Solder	Solder Mask	Solder Resist	1	
1	Top Layer	Signal		1.85	1
	Dielectric 1	Prepreg	FR-4 High Tg	4.396	
2	GND1	Signal		1.26	1
	Dielectric 2	Core	FR-4 High Tg	5	
3	SIG1	Signal		0.689	0.5
	Dielectric 3	Prepreg	FR-4 High Tg	10.312	
4	PWR1	Signal		1.26	1
	Dielectric 4	Prepreg	FR-4 High Tg	5	
5	PWR2	Signal		1.26	1
	Dielectric 5	Prepreg	FR-4 High Tg	10.312	
6	SIG2	Signal		0.689	0.5
	Dielectric 6	Core	FR-4 High Tg	5	
7	GND2	Signal		1.26	1
	Dielectric 7	Prepreg	FR-4 High Tg	4.396	
8	Bottom Layer	Signal		1.85	1
	Bottom Solder	Solder Mask	Solder Resist	1	
	Bottom Overlay	Overlay			

Impedances

#	Target impedance (Ω)	Type	Trace layer	Calculated	Trace width (mil)
1	50	Single	Top Layer	49.9925	7.845

2	50 Single	GND1	50.025	3.711
3	50 Single	SIG1	49.9837	5.985
4	50 Single	PWR1	49.996	5.389
5	50 Single	PWR2	49.996	5.389
6	50 Single	SIG2	49.9837	5.985
7	50 Single	GND2	50.025	3.711
8	50 Single	Bottom Layer	49.9925	7.845
9	50 Single	Top Layer	49.9925	7.845
10	50 Single	GND1	50.025	3.711
11	50 Single	SIG1	49.9837	5.985
12	50 Single	PWR1	49.996	5.389
13	50 Single	PWR2	49.996	5.389
14	50 Single	SIG2	49.9837	5.985
15	50 Single	GND2	50.025	3.711
16	50 Single	Bottom Layer	49.9925	7.845

Via types

#	Name	Type	Layers	Stack
1	Thru 1:8	Thru	Top Layer-Bottom Layer	
2	Blind 6:8	Blind	SIG2-Bottom Layer	
3	Thru 1:8	Thru	Top Layer-Bottom Layer	Board Layer Stack
4	Blind 1:2	Blind	Top Layer-GND1	Board Layer Stack

No back drills

Dk	Orientation	Copper Orientation
3.5	Top	Above
3.54	Top	Above
3.88	Top	Below
3.86	Top	Above
3.88	Top	Below
3.86	Top	Above
3.88	Top	Below
3.54	Bottom	Below
3.5		

Dk	Orientation	Copper Orientation
3.5	Top	Above
3.54	Top	Above
3.88	Top	Below
3.86	Top	Above
3.88	Top	Below
3.86	Top	Above
3.88	Top	Below
3.54	Bottom	Below
3.5		

Gap (mil) Reference layers
GND1

Stack

Top Layer;SIG1

GND1;PWR1

SIG1;PWR2

PWR1;SIG2

PWR2;GND2

SIG2;Bottom Layer

GND2

GND1	Board Layer Stack
------	-------------------

Top Layer;SIG1	Board Layer Stack
----------------	-------------------

GND1;PWR1	Board Layer Stack
-----------	-------------------

SIG1;PWR2	Board Layer Stack
-----------	-------------------

PWR1;SIG2	Board Layer Stack
-----------	-------------------

PWR2;GND2	Board Layer Stack
-----------	-------------------

SIG2;Bottom Layer	Board Layer Stack
-------------------	-------------------

GND2	Board Layer Stack
------	-------------------